UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,594	05/08/2001	Thomas W. Bucht	CROSS1380-1	2615

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EXAMINER
PUENTE, EMERSON C

ART UNIT	PAPER NUMBER
2113	

DATE MAILED: 01/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	Application No.	Applicant(s)
	09/851,594	BUCHT, THOMAS W.
	Examiner	Art Unit
	Emerson C Puente	2184

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>08 May 2001</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☐ Claim(s) _____ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-13</u> is/are rejected.

7) ☒ Claim(s) <u>10</u> is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4</u>.

4) ☐ Interview Summary (PTO-413) Paper No(s). _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities:

Please remove the second period after the word "required" (see page 12 top paragraph).

The term "register"(see item 120 figure 1, item 220 figure 2, and 320 figure 3 and throughout specification) is incorrectly defined. The specification cites "In any event the register is capable of making a determination as the validity or importance of the data and acts accordingly" (see page 12). The term "register" accepted meaning is "a device capable of retaining information..."(see IEEE Authoritative Dictionary of IEEE standards). In other words, a "register" under the accepted meaning is a storage unit for the purpose of retaining information. Thus, a register is incapable of making a determination as the validity or importance of the data.

Appropriate correction is required.

Claim Objections

Claim 10 is objected to because of the following informalities:

In regards to claim 10, please change "... least **on** of a ..." to "... least **one** of a ..." (see line 4 of claim). Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "register" in claim 1-6 and 13 is used by the claim to mean "sampling the data and determining whether the data is valid", while the accepted meaning is "a device capable of retaining information..."(see IEEE Authoritative Dictionary of IEEE standards). A "register" under the accepted meaning is merely a storage unit for the purpose of retaining information, not "a device capable of sampling data or determining whether data is valid". The term is indefinite because the specification does not clearly redefine the term.

For purposes of examination, examiner interprets "register" to be a "hardware device".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted

on an application for patent by another filed in the United States before the invention by the applicant
for patent, except that an international application filed under the treaty defined in section 351(a) shall
have the effects for purposes of this subsection of an application filed in the United States only if the
international application designated the United States and was published under Article 21(2) of such
treaty in the English language.

Claims 1-13 are rejected under 35 U.S.C. 102(e) as being anticipated by US

Patent 6,256,708 of Watanabe et al. referred hereinafter "Watanabe".

In regards to claim 1, Watanabe discloses:

directing a register to drive data via a first device (see column 9 lines 53-63);

driving the data via the register to the first device and a second device

simultaneously (see column 9 lines 53-63);

sampling of the data by the register and determining whether the data is valid.

Watanabe discloses a valid flag corresponding of the data of address lower AD-2 of the A

line, which represents the validity of the data (see column 9 lines 53-60); and .

signaling the second device as to whether the data is valid or invalid. Watanabe

discloses sending data to the cache memory when the data in the memory is invalid (see

column 9 lines 53-63).

In regards to claim 2, Watanabe discloses:

the register is capable of analyzing at least one bit of the data to determine if the

data is valid or invalid. Watanabe discloses a valid flag corresponding of the data of

address lower AD-2 of the A line, implying the analyzing of the address lower AD-2 of

the A line (see column 9 lines 53-63)

In regards to claim 3, Watanabe discloses:

the bit analyzed in determining the validity of the data is at least one of the most

significant bit and a least significant. Watanabe discloses the AD-2 of the A line as the

least significant it in the L2-TAGRAM and L2 status (see figure 3(b) and (c)).

In regards to claim 4, Watanabe discloses:

the first device comprises a CPU (see column 9 lines 59)

In regards to claim 5, Watanabe discloses:

wherein the second device comprises a memory device (see column 9 lines 62-

63).

In regards to claim 6, Watanabe discloses:

wherein the memory device further comprises at least one of a content

addressable memory, a hardware register, and a storage medium (see column 9 lines 62-

63).

In regards to claim 7, Watanabe discloses:

a CPU in communication with and capable of directing a first hardware device see

column 9 lines 53-63);

the first hardware device responsive to the CPU and capable of driving data

pursuant to instructions from the CPU (see column 9 lines 53-63), wherein the hardware

device is further capable of:

substantially simultaneously driving data to the CPU and a second

hardware device (see column 9 lines 53-63);

analyzing one or more bits from the data driven by the first hardware

device in determining validity of the data. Watanabe discloses a valid flag corresponding

of the data of address lower AD-2 of the A line, which represents the validity of the data

(see column 9 lines 53-60); and

transmitting a signal to the second hardware device regarding the validity

of the data Watanabe discloses sending data to the cache memory when the data in the

memory is invalid (see column 9 lines 53-63).

In regards to claim 8, Wanatabe discloses wherein first device comprises a

hardware register (see figure 1 item 16).

In regards to claim 9, Wanatabe discloses wherein the second hardware device

comprises writable hardware device (see column 9 lines 62-63).

In regards to claim 10, Wanatabe discloses wherein the writable hardware device

comprises at least one of a content addressable memory, a hardware register, and a

storage medium (see column 9 lines 62-63)

In regards to claim 11, Wanatabe discloses wherein the first hardware device

analyze at least one of a most significant bit, and a least significant bit in determining the

validity of the data. Watanabe discloses the AD-2 of the A line as the least significant it

in the L2-TAGRAM and L2 status (see figure 3(b) and (c)).

In regards to claim 12, Wanatabe discloses wherein the validity signal is

transmitted to the second hardware device at approximately near completion of the read

cycle of the CPU (see column 9 lines 53-63).

In regards to claim 13, Wanatabe discloses:

a hardware register capable of testing data for one or more validity bits (see

column 9 lines 53-63);

a CPU in communication with the hardware register during a first bus cycle,

wherein the CPU directs the hardware register to drive the data simultaneously to the

CPU and a second register and in close proximity to the data transfer, the hardware

register sends a validity signal to the second register without a subsequent bus cycle

instruction to the second register from the CPU (see column 9 lines 53-63).

Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

See Form PTO-892.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Emerson C Puente whose telephone number is (703) 305-

8012. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Robert W Beausoliel can be reached on (703) 305-9713. The fax phone

number for the organization where this application or proceeding is assigned is (703)

872-9306.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (703) 306-

5631.

Emerson Puente
12/9/03

ROBERT BEAUSOLIEL
SUPERVISORY PATENT EXAMINER
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